COMPUTING AT A GLANCE (Long Term Plan)

COMPUTING

INTENT – Luddenden CE School is committed to providing an environment which inspires confident, independent and innovative learners. Our Computing curriculum is designed to ensure our pupils develop the knowledge and skills that will enable them to go out into the world digitally literate and able to participate fully in the future digital lifestyles and workplace. We aim for our pupils to become digital creators as well as discerning digital consumers. Our curriculum ensures that pupils understand how to keep themselves safe online and develops pupils' resilience and responsiveness to the ever-changing online world and world of technology. Our core values in Computing are creativity, endurance, openness and respect.

IMPLEMENTATION – The Kapow Computing scheme of work will form the core computing curriculum. Throughout their time in school pupils will build, strengthen and enhance their computing knowledge, skills and understanding through a wide range of engaging, practical and relevant learning activities. Optimum use will be made of cross-curricular links to consolidate learning in Computing and to promote learning in other subjects.

IMPACT - Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. Children can analyse problems in computational terms, and have repeated practical experience of coding in order to solve such problems. Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. Children are responsible, competent, confident and creative users of information and communication technology. Children know how to stay safe online.

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Early Years	Computing continuous provision	Computing systems and networks: Using a computer	Programming: All about instructions Safer Internet Day	Computing systems and networks: Exploring hardware	Programing: Bee-Bots	Data handling: Introduction to data
Year 1	1. Computing systems and networks: Improving mouse skills Safety: Using the internet safely	1. Programming 1: Algorithms and debugging Safety: Online emotions	1. Skills showcase: Rocket to the moon Safer Internet Day	1. Programming: Bee-Bots Safety: Always be kind and considerate	1. Creating media: Digital imagery Safety: Posting and sharing	1. Data handling: Introduction to data Safety: How much time should we spend on technology?
Year 2/3 Cycle A	2. Computing systems and networks: What is a computer? Safety: What happens when I post online?	2. Computing systems and networks: Word Processing Safety: How do I keep my things safe online?	2. Creating media: Stop motion Safer Internet Day	3. Computing systems and networks: Networks Safety: It's my choice	3. Computing systems and networks: Emailing Safety: Is it true?	3. Computing systems and networks: Journey inside a computer Safety: Online safety poster
Year 2/3 Cycle B	2. Programming: Algorithms and debugging Safety: Beliefs, opinions and facts on the internet	2. Programming: Scratch Jr Safety: Who should I ask?	2. Data handling: International Space Station Safer Internet Day	3. Programming: Scratch Safety: When being online makes me upset	3. Creating media: Video trailers Safety: Sharing of information	3. Data handling: Comparison cards databases Safety: Rules of social media platforms
Year 4/5 Cycle A	4. Creating media: Website design Safety: What happens when I search online?	4. Skills showcase: HTML Safety: How do companies encourage us to buy online?	4. Computing systems and networks: Collaborative learning Safer Internet Day	5. Data handling: Mars Rover 1 Safety: Fact, opinion or belief?	5. Programming: Micro:bit Safety: What is a bot?	5. Skills showcase: Mars Rover 2 Safety: What is my #TechTimetable like?
Year 4/5 Cycle B	4. Data handling: Investigating weather Safety: Online protection	4. Programming: Further coding with Scratch Safety: Online communication	4. Programming: Computational thinking Safer Internet Day	5. Creating media: Stop motion animation Safety: Online reputation	5. Computing systems & networks: Search engines Safety: Online bullying	5. Programming: Programming music Safety: Online health
Year 6	6. Computing systems and networks: Bletchley Park and the history of computers Safety: Life online	6. Computing systems and networks: Exploring AI Safety: Sharing online	6. Data handling: Big data 1 Safer Internet Day	6. Programming: Into to Python Safety: Creating a positive online reputation	6. Data handling: Big data 2 Safety: Capturing evidence	6. Skills showcase: Inventing a product Safety: Password protections Safety: Think before you click